



st0005seq
SEQUENCE LISTING

<110> AVENTIS PHARMACEUTICALS, INC.

<120> COMPOSITIONS THAT CAN BE USED FOR REGULATING THE ACTIVITY OF PARKIN

<130> ST00005

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<170> PatentIn Ver. 2.1

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 100 105 110
 Lys Ile Lys Thr Gly Glu Trp Phe Tyr Glu Glu Arg Ala Lys Lys Phe
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 Gly Cys Leu Thr Leu Pro Asp Gln Gln Lys Leu Arg Leu Lys Ser Pro
 210 215 220
 Val Leu Arg Lys Gln Ala Cys Pro Gln Trp Lys His Ser Phe Val Phe
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 Val Trp Asp Gln Ala Leu Phe Gly Met Asn Asp Arg Leu Leu Gly Gly
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 Thr Arg Leu Gly Ser Lys Gly Asp Thr Ala Val Gly Gly Asp Ala Cys
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 Arg Cys Gln Gln Val Leu Gly Phe Leu Leu His Arg Gly Ala Val Cys
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 225 230 235 240
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Leu Arg Gln Ser Ser Leu Glu Leu Thr Val Trp Asp Gln Ala Leu Phe
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 Leu Lys Tyr Gln Val Ala Pro Ala Gln Leu Val Thr Arg Gln Leu Gln
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st0005seq

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 Ser Gly Val Thr Pro Ala Gln Leu Arg Gln Ser Ser Leu Glu Leu Thr
 245 250 255
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Key for text entitled: SEQUENCING LIST

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PARKIN, NUCLEOTIDE SEQUENCES AND USES

<212> DNA

<213> Artificial sequence

<223> Description of artificial sequence: Oligonucleotide



LISTE DE SEQUENCES

<110> AVENTIS PHARMA
INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE M

<120> COMPOSES CAPABLES DE MODULER L'ACTIVITE DE LA PARKINE,
SEQUENCES NUCLEOTIDIQUES ET UTILISATIONS

<130> PRJ00004

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<170> PatentIn Ver. 2.1

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Arg Leu Gly Ser Lys Gly Asp Thr Ala Val Gly Gly Asp Ala Cys Ser		
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1008		
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1062		
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His Tyr Cys Phe Lys Thr His Ser Leu Glu Ile Cys Ile Lys Ala Cys
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Val Lys Thr Tyr Leu Leu Pro Asp Arg Ser Ser Gln Gly Lys Arg Lys
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Thr Gly Val Gln Arg Asn Thr Val Asp Pro Thr Phe Gln Glu Thr Leu
100 105 110

Lys Tyr Gln Val Ala Pro Ala Gln Leu Val Thr Arg Gln Leu Gln Val
115 120 125

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130 135 140

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Ser Phe Arg Trp His Pro Leu Arg Ala Lys Ala Glu Lys Tyr Glu Asp
165 170 175

Ser Val Pro Gln Ser Asn Gly Glu Leu Thr Val Arg Ala Lys Leu Val
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Leu Pro Ser Arg Pro Arg Lys Leu Gln Glu Ala Gln Glu Gly Thr Asp
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Gln Pro Ser Leu His Gly Gln Leu Cys Leu Val Val Leu Gly Ala Lys
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Asn Leu Pro Val Arg Pro Asp Gly Thr Leu Asn Ser Phe Val Lys Gly
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 260 265 270

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Trp Asp Asp Val Leu Ile Pro Asn Arg Met Ser Gly Glu Cys Gln Ser
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His Pro Thr Ser Asp Lys Glu Thr Ser Val Ala Leu His Leu Ile Ala
 85 90 95

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 336

Thr Asn Ser Arg Asn Ile Thr Cys Ile Thr Cys Thr Asp Val Arg Ser
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Cys Phe His Leu Tyr Cys Val Thr Arg Leu Asn Asp Arg Gln Phe Val
 130 135 140

cac gac cct caa ctt ggc tac tcc ctg cct tgt gtg tag
 471

His Asp Pro Gln Leu Gly Tyr Ser Leu Pro Cys Val
 145 150 155

<210> 4
 <211> 156
 <212> PRT
 <213> Homo sapiens

<400> 4
 Gly Ser Pro Ala Gly Arg Ser Ile Tyr Asn Ser Phe Tyr Val Tyr Cys
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 Lys Gly Pro Cys Gln Arg Val Gln Pro Gly Lys Leu Arg Val Gln Cys
 20 25 30
 Ser Thr Cys Arg Gln Ala Thr Leu Thr Leu Thr Gln Gly Pro Ser Cys
 35 40 45
 Trp Asp Asp Val Leu Ile Pro Asn Arg Met Ser Gly Glu Cys Gln Ser
 50 55 60
 Pro His Cys Pro Gly Thr Ser Ala Glu Phe Phe Phe Lys Cys Gly Ala
 65 70 75 80
 His Pro Thr Ser Asp Lys Glu Thr Ser Val Ala Leu His Leu Ile Ala
 85 90 95
 Thr Asn Ser Arg Asn Ile Thr Cys Ile Thr Cys Thr Asp Val Arg Ser
 100 105 110
 Pro Val Leu Val Phe Gln Cys Asn Ser Arg His Val Ile Cys Leu Asp
 115 120 125
 Cys Phe His Leu Tyr Cys Val Thr Arg Leu Asn Asp Arg Gln Phe Val
 130 135 140
 His Asp Pro Gln Leu Gly Tyr Ser Leu Pro Cys Val
 145 150 155

<210> 5
 <211> 27
 <212> ADN
 <213> Séquence artificielle

<220>
 <223> Description de la séquence
 artificielle:Oligonucleotide

<400> 5
 ttaagaattc ggaagtccag caggtag
 27

<210> 6
 <211> 29
 <212> ADN
 <213> Séquence artificielle

<220>

<223> Description de la séquence
artificielle:Oligonucleotide

<400> 6

attaggatcc ctacacacaa ggcagggag
29

<210> 7

<211> 19

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence
artificielle:Oligonucleotide

<400> 7

gcggttgga tcaactacag
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<210> 8

<211> 17

<212> ADN

<213> Séquence artificielle

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<223> Description de la séquence
artificielle:Oligonucleotide

<400> 8

ggtctcggtg tggcatc
17

<210> 9

<211> 18

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence
artificielle:Oligonucleotide

<400> 9

ccgcttgctt ggaggaac
18

<210> 10
<211> 18
<212> ADN
<213> Séquence artificielle

<220>
<223> Description de la séquence
artificielle:Oligonucleotide

<400> 10
cgtatttctc cgccttgg
18

<210> 11
<211> 28
<212> ADN
<213> Séquence artificielle

<220>
<223> Description de la séquence
artificielle:Oligonucleotide

<400> 11
aatagctcga gtcagtgcag gacaagag
28

<210> 12
<211> 2347
<212> ADN
<213> Homo sapiens

<400> 12
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120
gctgagcttt tcatgatggt tctgtctgac ctggaaacat cttaaattgga agggcgtgag
180
cgcttggtcc atgcagtga gctcttccaa cctgggtcaa cgaaaacgga gaagaaatgg
240
cccaagaaat agatctgagt gctctcaagg agttagaacg cgaggccatt ctccaggtcc
300

tgtaccgaga ccaggcgggt caaaacacag aggaggagag gacacggaaa ctgaaaacac
360
acctgcagca tctccgggtg aaaggagcga agaacacgga ctgggagcac aaagagaagt
420
gctgtgcgcg ctgccagcag gtgctgggggt tctgtctgca ccggggcgcc gtgtgccggg
480
gctgcagcca ccgcgtgtgt gccagtgcc gagtgttcct gagggggacc catgcttggg
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720
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1260
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1320
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1380
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1440
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1560
acagcgttcc tcagagtaat ggagagctca cagtccgggc taagctgggt ctcccttcac
1620
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1680
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 1920
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 1980
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 2100
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 2160
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 2220
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 2280
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 2340
 aaaaaaa
 2347

<210> 13
 <211> 610
 <212> PRT
 <213> Homo sapiens

<400> 13
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 Ala Ile Leu Gln Val Leu Tyr Arg Asp Gln Ala Val Gln Asn Thr Glu
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 Glu Glu Arg Thr Arg Lys Leu Lys Thr His Leu Gln His Leu Arg Trp
 35 40 45
 Lys Gly Ala Lys Asn Thr Asp Trp Glu His Lys Glu Lys Cys Cys Ala
 50 55 60
 Arg Cys Gln Gln Val Leu Gly Phe Leu Leu His Arg Gly Ala Val Cys
 65 70 75 80
 Arg Gly Cys Ser His Arg Val Cys Ala Gln Cys Arg Val Phe Leu Arg
 85 90 95

1

Pro Asp Arg Ser Ser Gln Gly Lys Arg Lys Thr Gly Val Gln Arg Asn
 355 360 365
 Thr Val Asp Pro Thr Phe Gln Glu Thr Leu Lys Tyr Gln Val Ala Pro
 370 375 380
 Ala Gln Leu Val Thr Arg Gln Leu Gln Val Ser Val Trp His Leu Gly
 385 390 395 400
 Thr Leu Ala Arg Arg Val Phe Leu Gly Glu Val Ile Ile Pro Leu Ala
 405 410 415
 Thr Trp Asp Phe Glu Asp Ser Thr Thr Gln Ser Phe Arg Trp His Pro
 420 425 430
 Leu Arg Ala Lys Ala Glu Lys Tyr Glu Asp Ser Val Pro Gln Ser Asn
 435 440 445
 Gly Glu Leu Thr Val Arg Ala Lys Leu Val Leu Pro Ser Arg Pro Arg
 450 455 460
 Lys Leu Gln Glu Ala Gln Glu Gly Thr Asp Gln Pro Ser Leu His Gly
 465 470 475 480
 Gln Leu Cys Leu Val Val Leu Gly Ala Lys Asn Leu Pro Val Arg Pro
 485 490 495
 Asp Gly Thr Leu Asn Ser Phe Val Lys Gly Cys Leu Thr Leu Pro Asp
 500 505 510
 Gln Gln Lys Leu Arg Leu Lys Ser Pro Val Leu Arg Lys Gln Ala Cys
 515 520 525
 Pro Gln Trp Lys His Ser Phe Val Phe Ser Gly Val Thr Pro Ala Gln
 530 535 540
 Leu Arg Gln Ser Ser Leu Glu Leu Thr Val Trp Asp Gln Ala Leu Phe
 545 550 555 560
 Gly Met Asn Asp Arg Leu Leu Gly Gly Thr Arg Leu Gly Ser Lys Gly
 565 570 575
 Asp Thr Ala Val Gly Gly Asp Ala Cys Ser Gln Ser Lys Leu Gln Trp
 580 585 590
 Gln Lys Val Leu Ser Ser Pro Asn Leu Trp Thr Asp Met Thr Leu Val
 595 600 605

Leu His
610

<210> 14
<211> 1648
<212> ADN
<213> Homo sapiens

<400> 14
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agtgaggcag tttaaaaaaa aggcggagaa ctagaattat agaataatgg cacattttgt
120
gtatttgtaa aactaacggc ttgcatgggt cacaacccat ttcttatgcc tgtgttttcc
180
ttggcagcaa aattttctgtg gttcctccta ctccacctcc tgtcagcgag agccagtgc
240
gccgcagtcc tggcaggaag gtcagtgcac cagatattct gaaacctctc aatcaagagg
300
atcccaaattg ctctactaac cctattttga agcaacagaa tctcccatcc agtcgggcaa
360
ccagtaccat attctctgga ggttttagac acggaagttt aattagcatt gacagcacct
420
gtacagagat gggcaatttt gacaatgcta atgtcactgg agaaatagaa tttgccattc
480
attattgctt caaaacccat tctttagaaa tatgcatcaa ggctgtgaag aaccttgctt
540
atggagaaga aaagaagaaa aagtgcattc cgtatgtgaa gacctacctg ttgcccgaca
600
gatcctccca gggaaagcgc aagactggag tccaaaggaa caccgtggac ccgaccttcc
660
aggagacctt gaagtatcag gtggcccctg cccagctggg gaccgggcag ctgcaggctt
720
cgggtgtggc tctgggcacg ctggcccggg gagtgtttct tggagaagtg atcattcctc
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840
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ctaagctggg tctcccttca cggcccagaa aactccaaga ggctcaagaa gggacagatc
960
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1080
aactgagact gaagtcgcca gtcctgagga agcaggcttg cccccagtgg aaacactcat
1140

ttgtcttcag tggcgtaacc ccagctcagc tgaggcagtc gagcttggag ttaactgtot
 1200
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 1260
 aggagacac agctggttggc ggggatgcat gctcacaatc gaagctccag tggcagaaag
 1320
 tcctttccag ccccaatcta tggacagaca tgaactcttgt cctgcactga catgaaggcc
 1380
 tcaaggttcc aggttgcagc aggcgtgagg cactgtgcgt ctgcagaggg gctacgaacc
 1440
 aggtgcaggg tcccagctgg agaccctttt gaccttgagc agtctccatc tggggccctg
 1500
 tcccatggct taaccgccta ttggtatctg tgtatatatta cgttaaacac aattatgtta
 1560
 cotaagcctc tgggtgggtta tctcctcttt gagatgtaga aaatggccag attttaataa
 1620
 acgttgttac ccatgaaaaa aaaaaaaaa
 1648

<210> 15
 <211> 313
 <212> PRT
 <213> Homo sapiens

<400> 15
 Met Gly Asn Phe Asp Asn Ala Asn Val Thr Gly Glu Ile Glu Phe Ala
 1 5 10 15
 Ile His Tyr Cys Phe Lys Thr His Ser Leu Glu Ile Cys Ile Lys Ala
 20 25 30
 Cys Lys Asn Leu Ala Tyr Gly Glu Glu Lys Lys Lys Lys Cys Asn Pro
 35 40 45
 Tyr Val Lys Thr Tyr Leu Leu Pro Asp Arg Ser Ser Gln Gly Lys Arg
 50 55 60
 Lys Thr Gly Val Gln Arg Asn Thr Val Asp Pro Thr Phe Gln Glu Thr
 65 70 75 80
 Leu Lys Tyr Gln Val Ala Pro Ala Gln Leu Val Thr Arg Gln Leu Gln
 85 90 95
 Val Ser Val Trp His Leu Gly Thr Leu Ala Arg Arg Val Phe Leu Gly
 100 105 110
 Glu Val Ile Ile Pro Leu Ala Thr Trp Asp Phe Glu Asp Ser Thr Thr

115	120	125
Gln Ser Phe Arg Trp His Pro Leu Arg Ala Lys Ala Glu Lys Tyr Glu		
130	135	140
Asp Ser Val Pro Gln Ser Asn Gly Glu Leu Thr Val Arg Ala Lys Leu		
145	150	155
Val Leu Pro Ser Arg Pro Arg Lys Leu Gln Glu Ala Gln Glu Gly Thr		
	165	170
Asp Gln Pro Ser Leu His Gly Gln Leu Cys Leu Val Val Leu Gly Ala		
	180	185
Lys Asn Leu Pro Val Arg Pro Asp Gly Thr Leu Asn Ser Phe Val Lys		
	195	200
Gly Cys Leu Thr Leu Pro Asp Gln Gln Lys Leu Arg Leu Lys Ser Pro		
	210	215
Val Leu Arg Lys Gln Ala Cys Pro Gln Trp Lys His Ser Phe Val Phe		
225	230	235
Ser Gly Val Thr Pro Ala Gln Leu Arg Gln Ser Ser Leu Glu Leu Thr		
	245	250
Val Trp Asp Gln Ala Leu Phe Gly Met Asn Asp Arg Leu Leu Gly Gly		
	260	265
Thr Arg Leu Gly Ser Lys Gly Asp Thr Ala Val Gly Gly Asp Ala Cys		
	275	280
Ser Gln Ser Lys Leu Gln Trp Gln Lys Val Leu Ser Ser Pro Asn Leu		
	290	295
Trp Thr Asp Met Thr Leu Val Leu His		
305	310	

<210> 16

<211> 19

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 16
ccagttctgc ctgttcac
19

<210> 17
<211> 20
<212> ADN
<213> Séquence artificielle

<220>
<223> Description de la séquence artificielle:
oligonucleotide

<400> 17
ttcaaaacac agaggaggag
20

<210> 18
<211> 20
<212> ADN
<213> Séquence artificielle

<220>
<223> Description de la séquence artificielle:
oligonucleotide

<400> 18
gaatttggtc agtttagagg
20

<210> 19
<211> 26
<212> ADN
<213> Séquence artificielle

<220>
<223> Description de la séquence artificielle:
oligonucleotide

<400> 19
ttctgggatt tggagagctt ttccac
26

<210> 20

<211> 22
<212> ADN
<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 20

tctgtctgtc ccacacactg cc
22

<210> 21

<211> 19

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 21

gactggctcc gtctctctg
19

<210> 22

<211> 21

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 22

aagcaacaga atctcccatc c
21

<210> 23

<211> 21

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:

oligonucleotide

<400> 23

gcattgtcaa aattgcccac c

21

<210> 24

<211> 20

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 24

aggcggagaa atacgaagac

20

<210> 25

<211> 22

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 25

gcagagtggag acagccctta ac

22

<210> 26

<211> 24

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 26

cttctctcagg actggcgact tcag

24

<210> 27
<211> 24
<212> ADN
<213> Séquence artificielle

<220>
<223> Description de la séquence artificielle:
oligonucleotide

<400> 27
caagcggtcg ttcattccaa agag
24

<210> 28
<211> 22
<212> ADN
<213> Séquence artificielle

<220>
<223> Description de la séquence artificielle:
oligonucleotide

<400> 28
aagaggagat aaccaccag ag
22

<210> 29
<211> 20
<212> ADN
<213> Séquence artificielle

<220>
<223> Description de la séquence artificielle:
oligonucleotide

<400> 29
agggctgctg gctatttttc
20

<210> 30
<211> 19
<212> ADN
<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 30

taagaaatgg gttgtgaac
19

<210> 31

<211> 21

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 31

aagcaacaga atctcccatc c
21

<210> 32

<211> 21

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 32

gcattgtcaa aattgcccac c
21

<210> 33

<211> 20

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 33

aggcggagaa atacgaagac

20

<210> 34
<211> 22
<212> ADN
<213> Séquence artificielle

<220>
<223> Description de la séquence artificielle:
oligonucleotide

<400> 34
gcagagtgag acagccotta ac
22

<210> 35
<211> 24
<212> ADN
<213> Séquence artificielle

<220>
<223> Description de la séquence artificielle:
oligonucleotide

<400> 35
cttcctcagg actggcgact tcag
24

<210> 36
<211> 24
<212> ADN
<213> Séquence artificielle

<220>
<223> Description de la séquence artificielle:
oligonucleotide

<400> 36
caagcggtcg ttcattccaa agag
24

<210> 37
<211> 22
<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 37

aagaggagat aaccaccag ag
22

<210> 38

<211> 18

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 38

aatggaagg cgtgacgc
18

<210> 39

<211> 21

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 39

cctcacgcct gctgcaacct g
21

<210> 40

<211> 31

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
oligonucleotide

<400> 40
gcacgaattc atggcccaag aaatagatct g
31

<210> 41
<211> 24
<212> ADN
<213> Séquence artificielle

<220>
<223> Description de la séquence artificielle:
oligonucleotide

<400> 41
ctgtcttcgt atttctccgc cttg
24

<210> 42
<211> 2347
<212> ADN
<213> Homo sapiens

<400> 42
ggccttgagg cactgaggga tgccagttct gctgttcat ctggaacctg gatctaagga
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gggaagaggc gttgccctg ctggcatagt caggtaccag ccagccagg tattgaacgg
120
gctgagcttt tcatgatggt tctgctgac ctggaaacat cttaaattgga agggcgtgag
180
cgcttggtcc atgcagtga gctcttccaa cctgggtcaa cgaaaacgga gaagaaatgg
240
ccaagaaat agatctgagt gctctcaagg agttagaacg cgaggdcatt ctccagggtcc
300
tgtaccgaga ccaggcgggt caaacacag aggaggagag gacacggaaa ctgaaaacac
360
acctgcagca tctccgggtg aaaggagcga agaacacgga ctgggagcac aaagagaagt
420
gctgtgcgcg ctgccagcag gtgctggggt tctgctgca ccggggcgcc gtgtgccggg
480
gctgcagcca ccgcgtgtgt gccagtgcc gagtgttctt gagggggacc catgcctgga
540
agtgcacggg gtgcttcgag gacaggaatg tcaaaataaa aactggagaa tggttctatg
600
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660
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720
 gcgagagcca gtgcagccgc agtcctggca ggttacagga atttggtcag tttagaggat
 780
 ttaataagtc cgtggaaaat ttgtttctgt ctcttgctac ccacgtgaaa aagctctcca
 840
 aatcccagaa tgatatgact tctgagaagc atcttctcgc cacgggcccc aggcagtgtg
 900
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 960
 tcagtgcacc agatattctg aaacctctca atcaagagga tcccaaattgc tctactaacc
 1020
 ctattttgaa gcaacagaat ctcccatcca gtccggcacc cagtaccata ttctctggag
 1080
 gttttagaca cggaagttta attagcattg acagcacctg tacagagatg ggcaattttg
 1140
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 1200
 ctttagaaat atgcatcaag gcctgtaaga accttgcta tggagaagaa aagaagaaaa
 1260
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 1320
 agactggagt ccaaaggaac accgtggacc cgaccttca ggagaccttg aagtatcagg
 1380
 tggccctcgc ccagctggtg acccggcagc tgcaggtctc ggtgtggcat ctgggcacgc
 1440
 tggcccgag agtggttctt ggagaagtga tcattcctct ggccacgtgg gactttgaag
 1500
 acagcacaac acagtcttct cgctggcctc cgctccgggc caaggcggag aaatacgaag
 1560
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 1620
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 1680
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 1740
 catttggtta gggctgtctc actctgccag accaacaaaa actgagactg aagtcgccag
 1800
 tcctgaggaa gcaggcttgc cccagtgga aacactcatt tgtcttcagt ggcgtaacct
 1860
 cagctcagct gaggcagtcg agcttggagt taactgtctg ggatcaggcc ctctttggaa
 1920
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 1980
 gggatgcatg ctcaaatcg aagctccagt ggcagaaagt cctttccagc cccaatctat
 2040
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 2100
 ggcgtgaggc actgtgcgtc tgcagagggg ctacgaacca ggtgcagggt ccagctgga

2160
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2220
tggtatctgt gtatatattac gttaaacaca attatgttac ctaagcctct ggtgggttat
2280
ctcctctttg agatgtagaa aatggccaga ttttaataaaa cgttggtacc catgaaaaaa
2340
aaaaaaa
2347

<210> 43
<211> 610
<212> PRT
<213> Homo sapiens

<400> 43
Met Ala Gln Glu Ile Asp Leu Ser Ala Leu Lys Glu Leu Glu Arg Glu
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Ala Ile Leu Gln Val Leu Tyr Arg Asp Gln Ala Val Gln Asn Thr Glu
20 25 30
Glu Glu Arg Thr Arg Lys Leu Lys Thr His Leu Gln His Leu Arg Trp
35 40 45
Lys Gly Ala Lys Asn Thr Asp Trp Glu His Lys Glu Lys Cys Cys Ala
50 55 60
Arg Cys Gln Gln Val Leu Gly Phe Leu Leu His Arg Gly Ala Val Cys
65 70 75 80
Arg Gly Cys Ser His Arg Val Cys Ala Gln Cys Arg Val Phe Leu Arg
85 90 95
Gly Thr His Ala Trp Lys Cys Thr Val Cys Phe Glu Asp Arg Asn Val
100 105 110
Lys Ile Lys Thr Gly Glu Trp Phe Tyr Glu Glu Arg Ala Lys Lys Phe
115 120 125
Pro Thr Gly Gly Lys His Glu Thr Val Gly Gly Gln Leu Leu Gln Ser
130 135 140
Tyr Gln Lys Leu Ser Lys Ile Ser Val Val Pro Pro Thr Pro Pro Pro
145 150 155 160
Val Ser Glu Ser Gln Cys Ser Arg Ser Pro Gly Arg Leu Gln Glu Phe

				165					170					175	
Gly	Gln	Phe	Arg	Gly	Phe	Asn	Lys	Ser	Val	Glu	Asn	Leu	Phe	Leu	Ser
			180					185					190		
Leu	Ala	Thr	His	Val	Lys	Lys	Leu	Ser	Lys	Ser	Gln	Asn	Asp	Met	Thr
			195				200					205			
Ser	Glu	Lys	His	Leu	Leu	Ala	Thr	Gly	Pro	Arg	Gln	Cys	Val	Gly	Gln
	210					215					220				
Thr	Glu	Arg	Arg	Ser	Gln	Ser	Asp	Thr	Ala	Val	Asn	Val	Thr	Thr	Arg
225					230					235					240
Lys	Val	Ser	Ala	Pro	Asp	Ile	Leu	Lys	Pro	Leu	Asn	Gln	Glu	Asp	Pro
				245					250					255	
Lys	Cys	Ser	Thr	Asn	Pro	Ile	Leu	Lys	Gln	Gln	Asn	Leu	Pro	Ser	Ser
			260					265					270		
Pro	Ala	Pro	Ser	Thr	Ile	Phe	Ser	Gly	Gly	Phe	Arg	His	Gly	Ser	Leu
		275					280					285			
Ile	Ser	Ile	Asp	Ser	Thr	Cys	Thr	Glu	Met	Gly	Asn	Phe	Asp	Asn	Ala
	290					295					300				
Asn	Val	Thr	Gly	Glu	Ile	Glu	Phe	Ala	Ile	His	Tyr	Cys	Phe	Lys	Thr
305					310					315					320
His	Ser	Leu	Glu	Ile	Cys	Ile	Lys	Ala	Cys	Lys	Asn	Leu	Ala	Tyr	Gly
				325					330					335	
Glu	Glu	Lys	Lys	Lys	Lys	Cys	Asn	Pro	Tyr	Val	Lys	Thr	Tyr	Leu	Leu
			340					345					350		
Pro	Asp	Arg	Ser	Ser	Gln	Gly	Lys	Arg	Lys	Thr	Gly	Val	Gln	Arg	Asn
		355					360					365			
Thr	Val	Asp	Pro	Thr	Phe	Gln	Glu	Thr	Leu	Lys	Tyr	Gln	Val	Ala	Pro
		370				375					380				
Ala	Gln	Leu	Val	Thr	Arg	Gln	Leu	Gln	Val	Ser	Val	Trp	His	Leu	Gly
385					390					395					400
Thr	Leu	Ala	Arg	Arg	Val	Phe	Leu	Gly	Glu	Val	Ile	Ile	Pro	Leu	Ala
				405					410					415	
Thr	Trp	Asp	Phe	Glu	Asp	Ser	Thr	Thr	Gln	Ser	Phe	Arg	Trp	His	Pro

420 425 430
 Leu Arg Ala Lys Ala Glu Lys Tyr Glu Asp Ser Val Pro Gln Ser Asn
 435 440 445
 Gly Glu Leu Thr Val Arg Ala Lys Leu Val Leu Pro Ser Arg Pro Arg
 450 455 460
 Lys Leu Gln Glu Ala Gln Glu Gly Thr Asp Gln Pro Ser Leu His Gly
 465 470 475 480
 Gln Leu Cys Leu Val Val Leu Gly Ala Lys Asn Leu Pro Val Arg Pro
 485 490 495
 Asp Gly Thr Leu Asn Ser Phe Val Lys Gly Cys Leu Thr Leu Pro Asp
 500 505 510
 Gln Gln Lys Leu Arg Leu Lys Ser Pro Val Leu Arg Lys Gln Ala Cys
 515 520 525
 Pro Gln Trp Lys His Ser Phe Val Phe Ser Gly Val Thr Pro Ala Gln
 530 535 540
 Leu Arg Gln Ser Ser Leu Glu Leu Thr Val Trp Asp Gln Ala Leu Phe
 545 550 555 560
 Gly Met Asn Asp Arg Leu Leu Gly Gly Thr Arg Leu Gly Ser Lys Gly
 565 570 575
 Asp Thr Ala Val Gly Gly Asp Ala Cys Ser Gln Ser Lys Leu Gln Trp
 580 585 590
 Gln Lys Val Leu Ser Ser Pro Asn Leu Trp Thr Asp Met Thr Leu Val
 595 600 605
 Leu His
 610

<210> 44
 <211> 1648
 <212> ADN
 <213> Homo sapiens

<400> 44
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120
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 180
 ttggcagcaa aattttctgtg gttoctccta ctccacctcc tgtcagcgag agccagtga
 240
 gccgcagtcc tggcaggaag gtcagtgcac cagatattct gaaacctctc aatcaagagg
 300
 atcccaaattg ctctactaac cctatttttga agcaacagaa tctcccatcc agtccggcac
 360
 ccagtaccat attctctgga ggtttttagac acggaagttt aattagcatt gacagcacct
 420
 gtacagagat gggcaatttt gacaatgcta atgtcactgg agaaatagaa tttgccattc
 480
 attattgctt caaaacccat tcttttagaaa tatgcatcaa ggctgtgaag aaccttgctt
 540
 atggagaaga aaagaagaaa aagtgcattc cgtatgtgaa gacctacctg ttgcccagaca
 600
 gatcctccca gggaaagcgc aagactggag tccaaaggaa caccgtggac ccgaccttcc
 660
 aggagacctt gaagtatcag gtggcccttg cccagctggg gaccggcag ctgcaggtct
 720
 cgggtgtggca totgggcacg ctggcccgga gagtgtttct tggagaagtg atcattcctc
 780
 tggccacgtg ggactttgaa gacagcacia cacagtcctt ccgctggcat ccgctccggg
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 1020
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 1080
 aactgagact gaagtgcga gtctgagga agcaggcttg cccccagtgg aaacactcat
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 1260
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 1380
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 1440
 aggtgcaggg tccagctgg agacctttt gaccttgagc agtctccatc tgcggccctg
 1500
 tcccatggct taaccgccta ttggtatctg tgtatattta cgttaaacac aattatgtta

1560

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1620

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1648

<210> 45

<211> 313

<212> PRT

<213> Homo sapiens

<400> 45

Met	Gly	Asn	Phe	Asp	Asn	Ala	Asn	Val	Thr	Gly	Glu	Ile	Glu	Phe	Ala
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Ile	His	Tyr	Cys	Phe	Lys	Thr	His	Ser	Leu	Glu	Ile	Cys	Ile	Lys	Ala
			20					25					30		

Cys	Lys	Asn	Leu	Ala	Tyr	Gly	Glu	Glu	Lys	Lys	Lys	Lys	Cys	Asn	Pro
		35					40					45			

Tyr	Val	Lys	Thr	Tyr	Leu	Leu	Pro	Asp	Arg	Ser	Ser	Gln	Gly	Lys	Arg
	50					55					60				

Lys	Thr	Gly	Val	Gln	Arg	Asn	Thr	Val	Asp	Pro	Thr	Phe	Gln	Glu	Thr
65					70					75					80

Leu	Lys	Tyr	Gln	Val	Ala	Pro	Ala	Gln	Leu	Val	Thr	Arg	Gln	Leu	Gln
				85					90					95	

Val	Ser	Val	Trp	His	Leu	Gly	Thr	Leu	Ala	Arg	Arg	Val	Phe	Leu	Gly
			100					105					110		

Glu	Val	Ile	Ile	Pro	Leu	Ala	Thr	Trp	Asp	Phe	Glu	Asp	Ser	Thr	Thr
		115					120					125			

Gln	Ser	Phe	Arg	Trp	His	Pro	Leu	Arg	Ala	Lys	Ala	Glu	Lys	Tyr	Glu
	130					135					140				

Asp	Ser	Val	Pro	Gln	Ser	Asn	Gly	Glu	Leu	Thr	Val	Arg	Ala	Lys	Leu
145					150					155					160

Val	Leu	Pro	Ser	Arg	Pro	Arg	Lys	Leu	Gln	Glu	Ala	Gln	Glu	Gly	Thr
				165					170					175	

Asp	Gln	Pro	Ser	Leu	His	Gly	Gln	Leu	Cys	Leu	Val	Val	Leu	Gly	Ala
			180					185					190		

Lys Asn Leu Pro Val Arg Pro Asp Gly Thr Leu Asn Ser Phe Val Lys
 195 200 205

Gly Cys Leu Thr Leu Pro Asp Gln Gln Lys Leu Arg Leu Lys Ser Pro
 210 215 220

Val Leu Arg Lys Gln Ala Cys Pro Gln Trp Lys His Ser Phe Val Phe
 225 230 235 240

Ser Gly Val Thr Pro Ala Gln Leu Arg Gln Ser Ser Leu Glu Leu Thr
 245 250 255

Val Trp Asp Gln Ala Leu Phe Gly Met Asn Asp Arg Leu Leu Gly Gly
 260 265 270

Thr Arg Leu Gly Ser Lys Gly Asp Thr Ala Val Gly Gly Asp Ala Cys
 275 280 285

Ser Gln Ser Lys Leu Gln Trp Gln Lys Val Leu Ser Ser Pro Asn Leu
 290 295 300

Trp Thr Asp Met Thr Leu Val Leu His
 305 310

<210> 46

<211> 21

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle:
 oligonucleotide

<400> 46

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 21